

**ABSTRACT**

A monotonic digital-to-analog converter (DAC) for converting a digital input  
5 signal into an analog output signal comprises:  
an input node for receiving the digital input signal having at least M+L bits,  
an output node for delivering the analog output signal corresponding to the  
received digital input signal,  
a coarse conversion block comprising current sources and first switching means  
10 for converting M more significant bits of the digital input signal into a coarse block  
output current,  
a fine conversion block comprising a current divider and second switching means  
for converting L less significant bits of the digital input signal into a corresponding  
current value, the fine conversion block having means for receiving current from a  
15 first unselected current source of the coarse conversion block, and  
a first cascode means for active cascoding the coarse block output current,  
a second cascode means, for active cascoding the current from the first  
unselected current source.

A method for converting a digital input signal into an analog output signal  
20 is also provided.